Pump Disassembly

The Purpose of this Manual

This operation manual is mainly focused on the set up, cleaning and routine maintenance of the VasoPress DVT System. We recommend keeping this manual handy for reference purposes.

Product Description

The VasoPress DVT is a NONINVASIVE prophylactic system that helps decrease the incidence of deep vein thrombosis.

The system consists of the VP 500 air pump and compression garment(s) (sleeves) for the calf, or thigh. The pump supplies compression on a pre-set timing cycle (12 seconds on followed by 48 seconds of deflation), which is intermittent at a suggested pressure setting of 40-80 mmHg. The pressure in the garments is transferred to the calf and or thigh augmenting venous blood flow velocity, reducing stasis, while stimulating fibrinolysis, thus reducing the risk of early clot formation.

VP 500 Description

- The pump is user-friendly and the functions are self-explanatory.
- Audible and visual alarm for low or continuous pressure.
- Illuminated On/Off switch.
- Pressure Control Function provides an adjustment of pressure from 20-60 mmHg. The recommended setting is 40 mmHg.
- CPC snap lock connectors with auto shut off for single garment use.
- Hanging bracket provides easy attachment.

VasoPress Garments (VP 501 Calf, VP 530 Thigh)

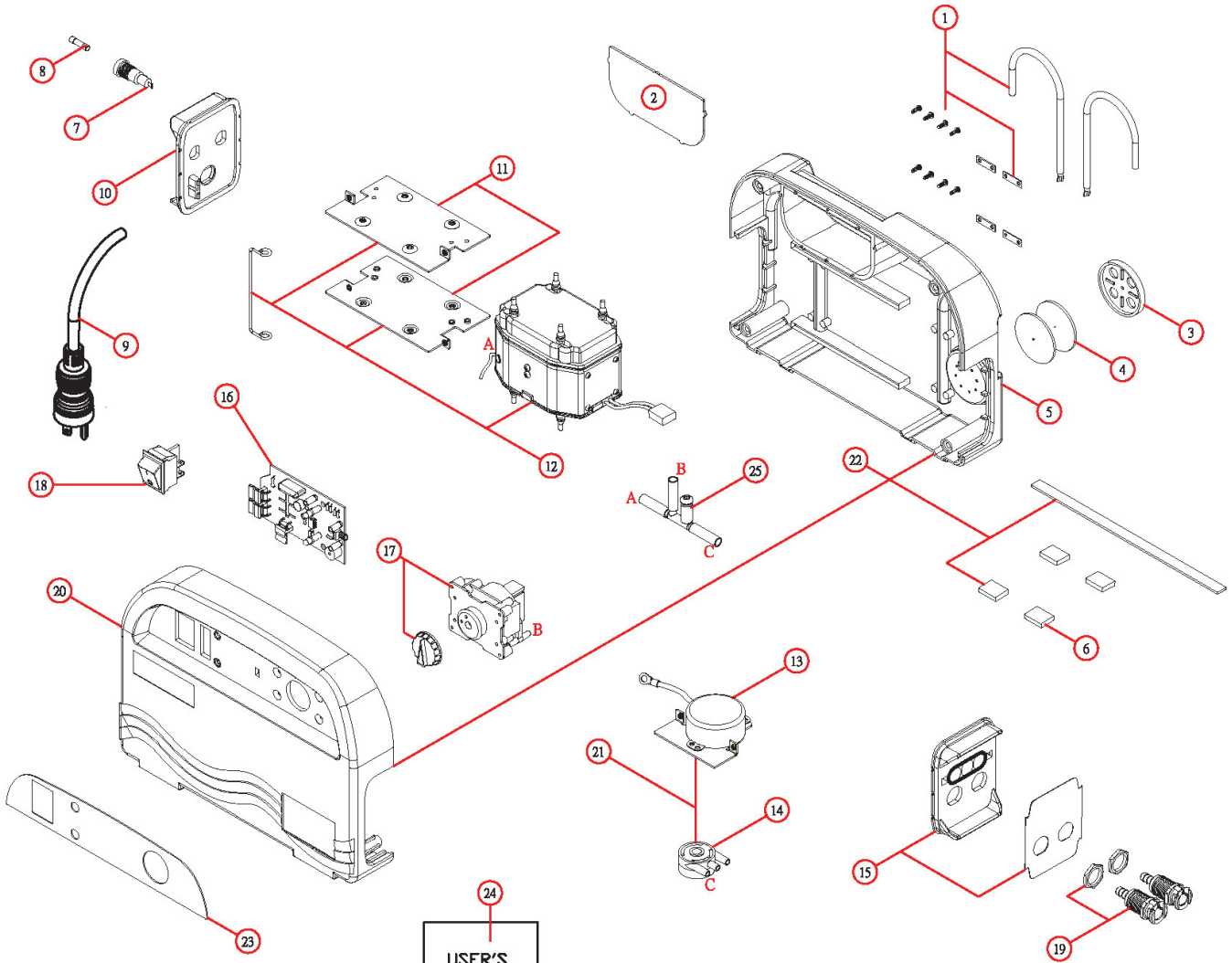
- Triple laminated material.
- Durable PVC Bladder.
- Tricot lining for comfort
- CPC snap-lock connectors.
- High quality hook and loop closure.

Technical Data

Technical Data	
Model No	**VP500**
Size	12.6”(L) x 3.94” (W)x 7.90” (H)
Weight	5.2 Pounds
Rated Voltage	120
Max Current	15.9W
Rated Frequency	60 Hz
Protection Type	Class II, Type BF
Mode of Operation	Continuous
Safety Standard	UL

VasoPress Garments				
Product #	**VP 501 M**	**VP 501 L**	**VP 530 M**	**VP 530 L**
Size (inch)	Up to 18” Calf	Up to 24” Calf	Up to 29” Thigh	Up to 36” Thigh
Weight	4 oz	5 oz	8 oz	10 oz
Bladder Material	0.4 mm PVC	0.4 mm PVC	0.4 mm PVC	0.4 mm PVC
Cover Material	Brushed Nylon	Brushed Nylon	Brushed Nylon	Brushed Nylon
Foam	Polyester	Polyester	Polyester	Polyester
Inner Liner	Tricot	Tricot	Tricot	Tricot

Explosion Diagram & Parts List (PUMP)



Model No: VP500 VASOPRESS DVT PUMP

Specification: Hospital-Grade 120V/60Hz, 2-1ALT, 1MIN, 40~80mmHg, 1Fuse, 26Sec. Alarm

ITEM	DESCRIPTION	QTY	PART NUMBER
25	RELEASE VALVE SET, 90mmHg	1	CCD02001
24	User's Guide	1	WC-CTC2401
23	Front Panel Label	1	WC-CTC2301
22	Front and back cases Set	1	WC-CTC2201
21	Timing motor Set	1	WC-CTC2101
20	Front Cover	1	WC-CTC2001
19	CPC connector	2	AD0322002
18	Power Switch	1	WC-CTC1801
17	Pressure Control Unit w/ Knob	1	WC-CTC1701
16	PC Board, TD-35	1	WC-CTC1601
15	Air Outlet Plate W/O CPC Connectors	1	WC-CTC1501
14	Valve Set	1	WC-CTC1401
13	Timer	1	WC-CTC1301
12	Pump assembly Set	1	WC-CTC1201
11	Pump Fixture	2	WC-CTC1101
10	Power Side Plate	1	WC-CTC1001
9	Power Cord and Plug	1	WC-CTC0901
8	Fuse	1	WC-CTC0801
7	Fuse Housing Set	1	WC-CTC0701
6	Rubber Foot	4	WC-CTC0601
5	Back Cover	1	WC-CTC0501
4	Filter	2	WC-CTC0401
3	Filter Cover	1	WC-CTC0301
2	Handle Cover	1	WC-CTC0201
1	Hook Set	1	WC-CTC0101

TOLERANCES							
UNLESS SPECIFIED OTHERWISE, ALL TOLERANCES ARE BELOW							
1~4mm ±0.020mm 4~6mm ±0.025mm 6~63mm ±0.050mm 63~250mm ±0.070mm 250~1000mm ±0.100mm 1000~1500mm ±0.200mm	B	ECN2007012201	Add Item 25		2007/01/18	
	A	ECN2006033002	New Drawing		2006/03/30	
	REV	ECN NO.	DESCRIPTION	DWN BY	DATE	APR BY

DWG NAME	FC-CTC0001V1				
DWG NO.	FC-CTC0001	REV B	DSN BY	DWN BY	APR BY
UNIT mm	SCALE 1 : 5	SHT 1 OF 1	DATE	DATE 2007/01/18	DATE 2007/01/18

Instruction Proper Use

System Set Up and Operating Instructions- The Vaso Press DVT System is very easy to set up. The following steps should be followed:

1. Please read this instruction manual in its entirety before setting up.
2. Once the pump and garments have been removed from their packaging, plug the pump into an electrical outlet. **Do Not Switch On.**
3. Position the pump on any flat surface.
4. The garments may be used on either leg.
5. Unfold the garments and position the panel labeled “THIS SECTION BEHIND CALF” behind the patient’s CALF. The end where the tubing is located should be at the ankle.
6. Snugly wrap the garment around the patient’s calf and making sure the inflatable bladder is directly behind the patient’s calf section, then secure with the tabs. The garment should fit securely but not tightly around the patent’s leg.
7. Repeat the procedure for the other leg. Note: If only one garment is to be used, simply leave the unused air outlet on the pump free (no tubing attached).
8. Air tubing is required to connect the garment to the pump and is provided separately. Attach the garments to the air tubing using the white snap lock connectors. Each tube has a male end connector at one end and a female end connector at the other. The female end (large white connector) will fit to the male end (small white connector) that is on the garment. Make certain that a “click” sound is heard to insure a solid connection.
9. Attach the other end(s) of the air tubing (male end) to the large white female connectors(s) on the pump. Make certain that a click is heard with each snap lock connection. If you need to disconnect the tubing, press the silver colored tab on large white (female) connector and pull apart.
10. Adjust the pump pressure to the recommended pressure setting unless otherwise specified/ordered by a physician.
11. Press the on/off switch to turn on pump on.

Cleaning

Garments

An authorized vendor may reprocess VasoPress DVT Garments, product numbers VP 501M, VP 501L, VP 530M and VP 530L.

Cleaning the VP 500 Pump

SWITCH OFF THE ELECTRICAL SUPPLY TO THE PUMP AND DISCONNECT THE POWER CORD FROM THE MAIN SUPPLY BEFORE CLEANING AND INSPECTION

The pump should be cleaned following use by using a damp soft cloth and mild detergent.

The pump casing is manufactured from high impact ABS and if the case is soiled the pump can be wiped down with a sodium hypochlorite solution to dilution of 1000ppm or any EPA- approved, hospital grade disinfectant. **(Do not use phenol based cleaning solution)**

Storage and Care

Pump:

1. Check the power cord and plug for abrasions or excessive wear.
2. Plug in the unit and verify air flows from the ports. To accomplish this a tube set will have to be inserted due to the auto shut-off outlet ports.
3. Place in plastic bag for storage.

Maintenance & Troubleshooting

No daily maintenance is required. It is intended that properly qualified, authorized technical personnel should only service equipment.

Troubleshooting		
Symptoms	**Inspection Procedure**	**Possible Solution**
Pump not functioning	1. Pump is not plugged in. 2. PC board malfunctions. 3. Fuses lose or burnt out	1. Check plug 2. Return to Svc Center to replace PC board 3. Tighten or Replace fuse
Pump functioning but no air out put	1. Bellows in compressor fails 2. Internal air tubing loose 3. Compressor coil failure 4. Timing motor has malfunctioned	1. Reconnect Air Tubes Return to Svc Ctr. to: 1. Replace diaphragm 2. Check and secure tubing 3. Replace coil 4. Replace timing motor
Low pressure light and or audible alarm activates	1. Check all tube connections. 2. Bellows in pressure control fails 3. Micro switch failed 4. Timer Motor Failed 5. Garment is defective	1. Reconnect Air Tubing 2. Check Garment Return to Svc Ctr. to 1. Replace Pressure Control

		2. Replace Timer Motor 3. Replace micro switch

Warranty

Compression Therapy Concepts Inc. guarantees that this equipment is free from defects in material and workmanship. Our obligation under this warranty is limited to the repair of equipment returned to the service address given below, transportation charges prepaid, within 12 months after delivery to the original purchaser for all equipment.

CTC agrees to service and/or adjust any equipment returned for that purpose and to replace or repair any part, which is proven to be defective at no charge.

This warranty excludes equipment damage through shipping, tampering, improper maintenance, accident, negligence, misuse, or products, which have been altered, or repaired.

In no event shall Compression Therapy Concepts Inc. be liable for any direct, indirect of consequential damages or losses resulting from the use of equipment.

Calibrations and Servicing

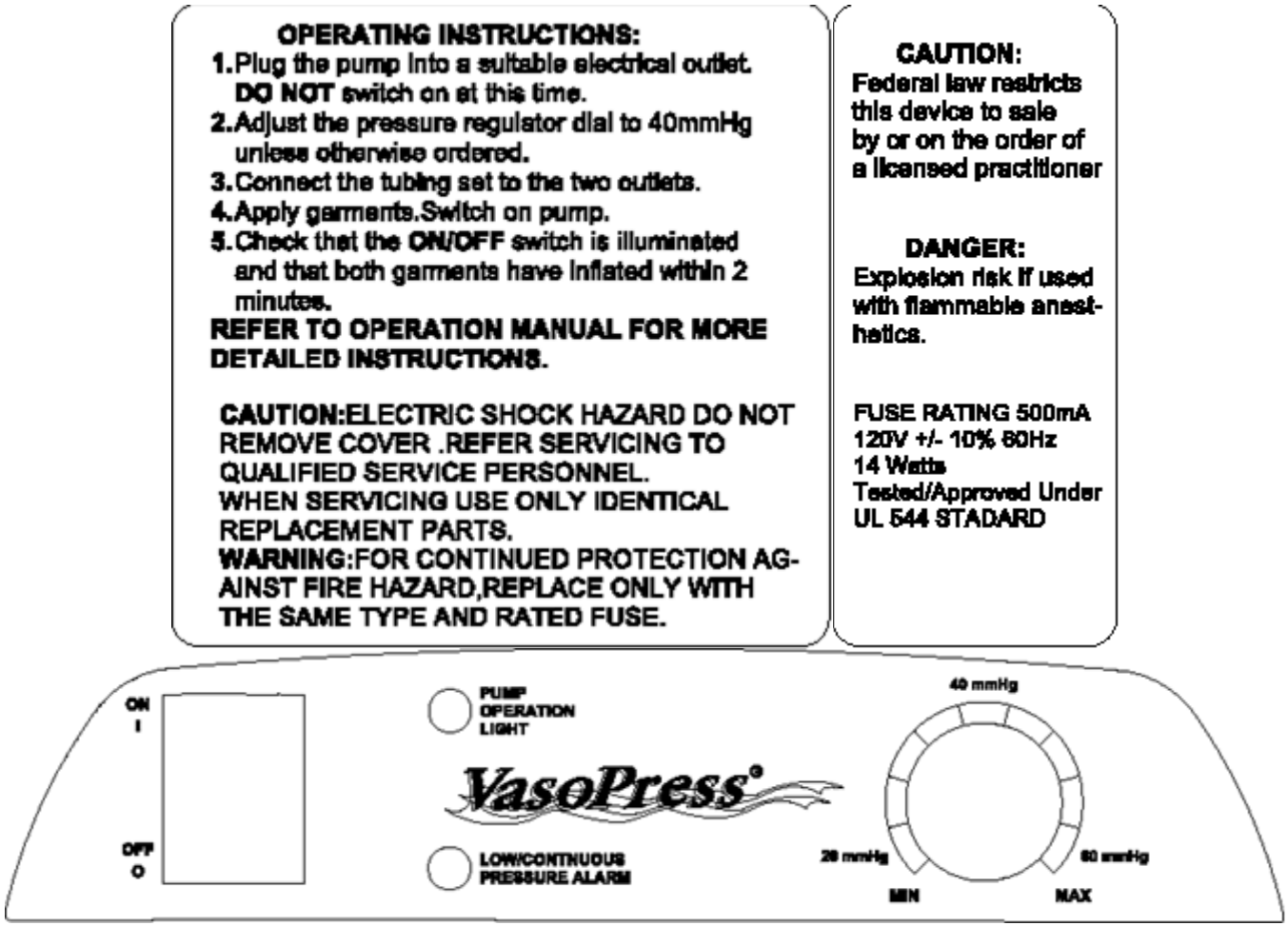
To Adjust Pressure - Remove Dial and follow instructions below:

Before removing the dial, note the pressure using an in-line mercury manometer with the dial placed at 40-mmHg of pressure [1].

With the mercury manometer, attached in-line, turn screw under dial and adjust the pressure. Turn screw clockwise to increase the pressure and counter clockwise to decrease the pressure. Replace the dial and check the pressure to ensure the 40 mmHg on the dial is equal to the same pressure on the mercury manometer. Repeat the procedure until the dial and mercury manometer are equal. **Pressure should be checked and adjusted if necessary every 12 months.**

[1]Cycle time is 12 seconds on and 48 seconds off. Adjust pressure when mercury manometer has reached maximum (approximately 4 seconds after air has entered the ContentsPurpose

Labels


OPERATING INSTRUCTIONS:
1. Plug the pump into a suitable electrical outlet. DO NOT switch on at this time.
2. Adjust the pressure regulator dial to 40mmHg unless otherwise ordered.
3. Connect the tubing set to the two outlets.
4. Apply garments.Switch on pump.
5. Check that the ON/OFF switch is illuminated and that both garments have inflated within 2 minutes.
REFER TO OPERATION MANUAL FOR MORE DETAILED INSTRUCTIONS.
CAUTION:ELECTRIC SHOCK HAZARD DO NOT REMOVE COVER .REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
WHEN SERVICING USE ONLY IDENTICAL REPLACEMENT PARTS.
WARNING:FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,REPLACE ONLY WITH THE SAME TYPE AND RATED FUSE.
CAUTION:
Federal law restricts this device to sale by or on the order of a licensed practitioner
DANGER:
Explosion risk if used with flammable anesthetics.
FUSE RATING 500mA
120V +/- 10% 60Hz
14 Watts
Tested/Approved Under UL 544 STADARD
ON
I
OFF
O
PUMP OPERATION LIGHT
VasoPress
LOW/CONTINUOUS PRESSURE ALARM
40 mmHg
20 mmHg
60 mmHg
MIN
MAX

Pump Disassembly

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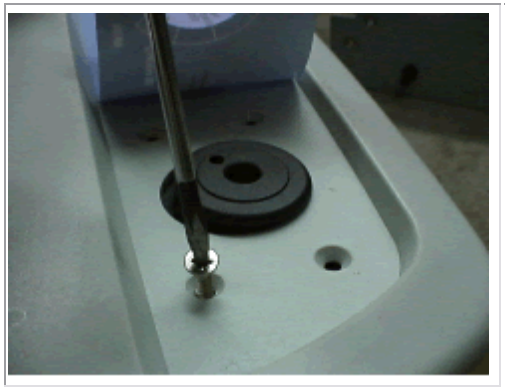
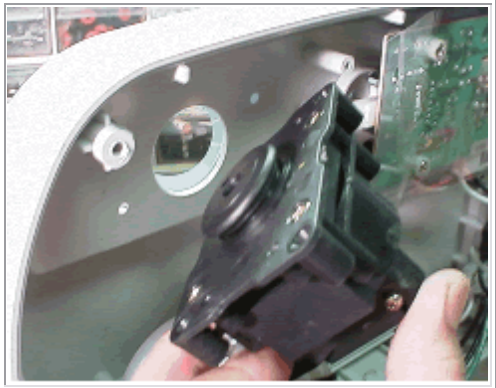
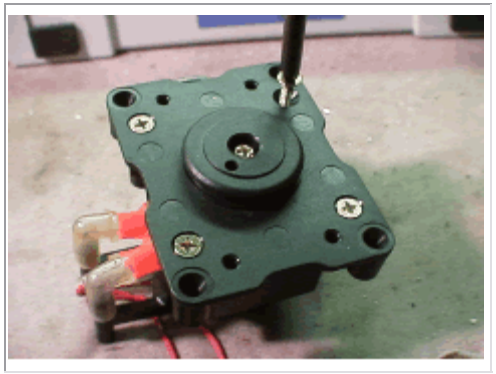
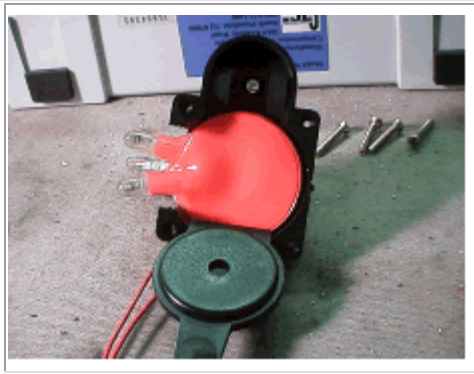
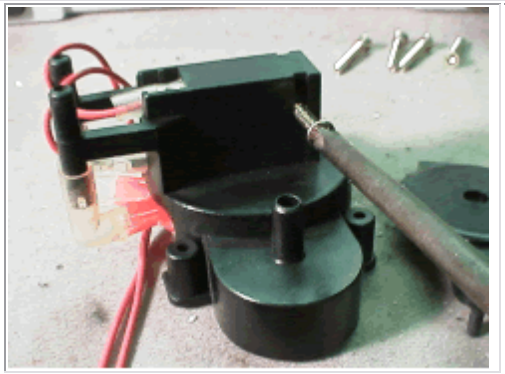
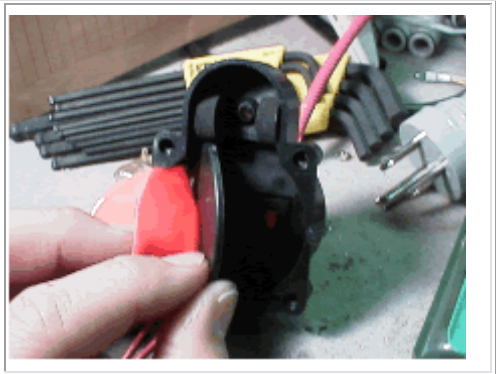
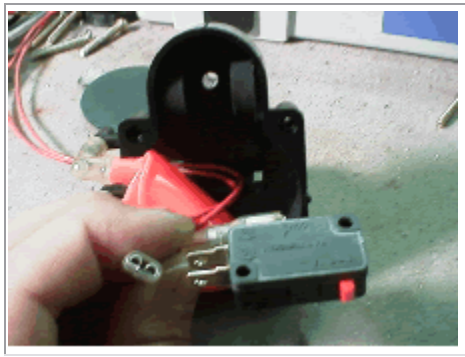
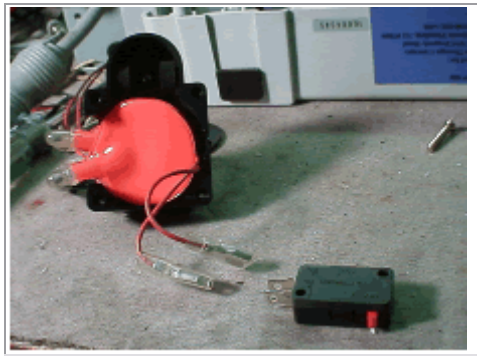
4		5		6	
7		8		9	

10		**11**		**12**	
13		**14**		**15**	